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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,953	12/29/1999	THOMAS S. AFFERTON	IDS-113523	1668

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EXAMINER

GEORGE, KEITH M

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/473,953

Applicant(s)

AFFERTON, THOMAS S.

Examiner

Keith M. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- a. On page 10, lines 9-13, the reference signs 622, 624, 614 and 626 do not appear in figure 5b.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

- a. In figure 5b, reference signs 522, 524 and 526.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner

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has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

### *Claim Objections*

5. Claims 7-12 are objected to because of the following informalities: Claim 7 consists of more than one sentence. Claims 8-12, depending from claim 7, are likewise objected to.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4-7 and 10-12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Chapman, U.S. Patent 5,974,027 (hereinafter Chapman).

8. Referring to claims 1 and 7, Chapman teaches a method, in an SDH network, for 1:n path protection architecture where one protection path or section serves n working paths or sections (column 6, lines 64-65 and column 1, lines 31-32). In figure 1, Chapman teaches four nodes 1, 2, 3, 4. Nodes 1 and 2 are connected by working path 5, while nodes 3 and 4 are connected by working path 6 (SONET ring family). A protection path 7 is provided which is of a closed ring shape and serves to interconnect all the noted 1, 2, 3, 4 in the network and protect both working

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paths 5 and 6 (additional protection SONET ring) (column 3, lines 14-22). Two automatic switch initiation criteria are provided at least one of which must be flagged before any switching action occurs onto the protection path 7 (detecting a service alarm in a SONET ring and directing traffic onto the protection ring) (column 3, lines 32-35). Chapman also teaches a Lockout of protection that prevents any of the worker paths from accessing the protection ring. If any path is currently utilizing the protection ring then this command shall cause the traffic to switch back to the worker path (determining whether there are any alarms on the protection ring, determining if the ring is in use and marking the ring as being in use) (column 3, lines 53-57).

9. Referring to claims 4 and 10, Chapman teaches the method described in claims 1 and 7 above where it is clearly shown in figure 1 that the protection ring 7 has nodes in all nodes served by the ring family, 1, 2, 3, 4.

10. Referring to claims 5 and 11, Chapman teaches the method described in claims 1 and 7 above where it is clearly shown in figure 1 that the failed facilities are routed on the protection ring in the same manner as on the working channel.

11. Referring to claims 6 and 12, Chapman teaches the method described in claims 5 and 11 above and also teaches a means of telling the remote end to enable or disable the bridging of traffic along the long path if traffic has been selected from the shorter route instead (column 4, lines 38-53).

### *Claim Rejections - 35 USC § 103*

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman.

Chapman teaches the method as described in claims 1 and 7 above but is possibly silent with respect to the ring family being a set of rings that share the same fiber sheath. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art that the drawings of Chapman do not specifically indicate if the rings are a part of the same fiber sheath but that it would definitely be possible for all of the rings to be a part of the same fiber sheath.

One of ordinary skill in the art would understand that a fiber sheath typically contains many individual fibers and that a drawing indicating two or more separate fiber links does not necessarily require running a single strand of fiber to implement each link in the drawing.

14. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman as applied to claims 2 and 8 above, and further in view of Fishman, U.S. Patent 5,982,517

(hereinafter Fishman). Chapman teaches the method described in claims 2 and 8 above but is possibly silent with respect to the ring family sharing dense wavelength division multiplexed optical transport systems. Fishman teaches restoration technique in mixed telecommunications networks comprising SONET rings and WDM point-to-point links by using WDM link protection using colorblind and wavelength selective optical switches (column 2, lines 9-14). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the WDM technique of Fishman on the protection arrangement of Chapman. One of ordinary skill in the art would have been motivated to do this to provide a level of protection for

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WDM links equivalent to SONET ring protection or sufficient for required network reliability (Fishman, column 2, lines 1-4).

*Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Kremer, U.S. Patent 5,406,549, teaches ring interworking between path-switched ring transmission systems.
- b. Simmons, U.S. Patent 6,396,852, teaches ring bundling in the design of rings for telecommunications networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 703-305-6531. The examiner can normally be reached on M-Th 7:00-4:30, every other F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Keith M. George  
March 24, 2003



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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600